UNITED STATES DISTRICT COURT EASTERN DISTRICT OF NEW YORK

VARIA HOLDINGS LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

Case No. 1:23-cv-07477-RPK-RML
ORAL ARGUMENT REQUESTED

VARIA HOLDINGS LLC'S REPLY BRIEF REGARDING CLAIM CONSTRUCTION

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Apple's constructions: (1) are contrary to the intrinsic record, (2) improperly limit the claims to disclosed embodiments, and (3) based on the wrong legal standards. If applied, they would render several claims invalid. They should be rejected as contrary to controlling precedent.

I. ARGUMENT

A. "Transceiver" ('984 Patent, Claims 1, 9, 13; '974 Patent, Claims 1, 6, 8); "Transmitter" ('984 Patent, Claims 21, 32; '974 Patent, Claim 12); and "Communication Circuitry" ('947 Patent, Claims 16, 26)

Apple's constructions turn on its unsupported allegation that applicants' "single component" argument is what led to the allowance of Varia's patent claims. Apple's argument fails. The PTO expressly rejected the "single component" argument no less than four consecutive times and never reversed course or otherwise relied on it. In fact, just prior to issue, applicants *expressly acquiesced* to the Examiner's broader construction of "transceiver," and offered new arguments to distinguish their claims over the prior art separate and apart from the "transceiver" limitation. The Examiner then amended the claims based on these arguments, allowing the claims to issue. Nothing in the record warrants limiting "transceiver" to a single component.

Applicants' final appeal brief related to the Cooper reference, which involved a Bluetooth headset (for voice calls), optionally equipped with separate, independent RFID tag circuitry that could be added to provide RFID. Buehrer Decl. Ex. C at p. 8 ¶ 32. The Examiner had found that "the sum total" of Cooper's circuitry "is the transmitter/transceiver," with the RFID and Bluetooth as separate "units of the transceiver/transmitter." Scharn Decl. Ex. 4 at 299. On appeal, applicants noted that even under the Examiner's broad "transceiver" construction, Cooper did not teach Varia's claimed invention because it still lacked a switchable *mobile communications device*—i.e., Cooper's RFID tag would function independently of the device's other communications:

Cooper clearly describes that 'RFID tag circuitry' can be *added* [E]ven if the term 'transceiver' were to be interpreted as expansively as the Action suggested,

Cooper would still not teach or suggest the 'switching' language above. . . . Cooper does not teach any change in the RFID tags [sic] responsiveness based on whether or not Bluetooth communications are occurring.

Scharn Decl. Ex. 4 at 333, 335. (emphasis added). Both Varia and the Patent Office agreed that the claimed "transceiver" could include more than a single component—rejecting Apple's litigation argument to the contrary.

It was this "mobile communications device" distinction that carried the day, as reflected in the Examiner's subsequent amendment to claim 1. A blackline of the changes introduced by the Examiner's amendment are reproduced in Lieber Decl. Ex. 4. The preamble to claim 1 previously recited: "[a] method for providing a radio frequency identification." The Examiner's primary change introduced the following clause to the preamble's conclusion:

from a *switchable mobile communications device* capable of RFID communication and voice call communication

Id. at 1 (emphasis added). This amendment directly responded to applicants' argument that Cooper's RFID tag functioned independently of, and could not be switched by, the mobile communications device. It also mirrors applicants' subsequent '947 patent prosecution history argument, explaining that the transceiver—while not limited to a single component—must be integrated into the device in order to be switched by it:

Zalewski does not teach or suggest switching a *mobile communication device* . . . because the RFID tag in Zalewski is separate from the mobile communication device. . . . the primary functionality of the RFID tag and mobile device are independent of one another the RFID . . . functions independently and continuously, regardless of a state change of a mobile station (4) to which it is attached.

Scharn Decl. Ex. 6 at 235-37. Apple's expert, Dr. Buehrer, was unable to identify any disclosure requiring that Cooper's RFID tag circuitry be connected to or otherwise integrated into the device's electronics. Lieber Decl. Ex. 6 at 97:9-98:9. He further conceded that under a "natural

interpretation," Cooper's RFID tag would function independently of the device's other communications. *Id.* at 102:10-22.

No disclaimer existed. But even if it did, controlling precedent "allows applicants to rescind a disclaimer during prosecution." *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366 (Fed. Cir. 2004); *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995-96 (Fed. Cir. 2003) (recognizing that "acquiesce[nce] in the examiner's comments" prevents disclaimer); *see also Semcon IP Inc. v. Huawei Device USA Inc.*, Case No. 2:16-cv-00437, 2017 WL 2972193, at *9 (E.D. Tex. Jul. 12, 2017) (finding acquiescence); *S. Rsch. Inst. & Genzyme Corp. v. Abon Pharm. LLC*, No. 12-cv-4709, 2013 WL 4509925, at *7 (D.N.J. Aug. 22, 2013) (same). Here, applicants expressly authorized the Examiner's amendment, thereby acquiescing and preventing disclaimer. Scharn Decl. Ex. 4 at 355. Thus, the claim language controls, and, as the Examiner found, "the claims do not recite [a] 'single component'" transceiver. Scharn Decl. Ex. 4 at 255.

Apple cannot point to any intrinsic evidence establishing that applicants' "single component" argument was critical for allowance. Significantly, Dr. Buehrer admitted that the new changes first introduced by the Examiner's amendment is what made the claims patentable. Lieber Decl. Ex. 6 at 88:4-8 ("the examiner felt that the amendments that he proposed were necessary to make the claims allowable or patentable."). This admission by Apple's own expert belies Apple's litigation argument. To establish the Examiner was supposedly persuaded by the single component argument, Apple relies on selected excerpts of the Examiner's Amendment. In particular, Apple argues that the allegedly new limitations relating to switching a transceiver/transmitter from a voice state to an RFID state were the new matter and "point of distinction" introduced by the Examiner. (Apple Inc.'s Responsive Claim Construction Brief ("Opp.") at 10). Crucially, however, Apple fails to acknowledge that these very limitations (i.e., switching a transceiver/transmitter

from a voice state to an RFID state) were each present in the claims *throughout prosecution*, *before* the Examiner's amendment.¹ Thus, the intrinsic record makes clear that apart from the addition of the "switchable mobile communications" language—which, as explained above, indicated that the transceiver must be integrated into and controlled by the device—the Examiner's amendment did not limit the number of transceiver components or otherwise limit any transceiver parameters. In sum, Apple is left with nothing more than Dr. Buhrer's *ipse dixit*, unsupported by any intrinsic evidence or record support, that "the allowance was predicated on an alleged invention involving a single transceiver, capable of operating in two states". (Opp. at 10).²

B. "Switchable Mobile Communication[s] Device" ('984 Patent, Claims 1, 13, 21,32; '974 Patent, Claims 1, 8, 12)

Apple's proposed construction of "switchable mobile communication[s] device"—requiring mutually exclusive RFID and voice states—is flawed. First, Apple's interpretation is not grounded in the claim language itself. While Apple acknowledges that not all claims "specify what switches" (Opp. at 13)—Apple nevertheless grounds its interpretation exclusively on portions of the intrinsic record pertaining to the *transceiver*, not the *mobile communications device* itself. For example, Apple points to a single, disclosed embodiment of a *transceiver* in Figure 4 that allegedly shows mutually exclusive switching. (Opp. at 13-14). Likewise, Apple points to applicants' 2010 prosecution history statements that related to switching a *transceiver*. (Opp. at 15) (citing Scharn Ex. 4 at 227, relating to a transceiver). Even setting aside that Apple's arguments are grounded in

¹ See Lieber Decl. Ex. 4 at cl. 1 (reciting "switching a transceiver of the mobile communication[s] device from a first state to a second state" prior to amendment); cl. 21 (reciting to "operate the transmitter to switch between the first and second sections to . . . output first data as a RFID . . . and [] output a voice call signal" prior to amendment); cl. 33 (reciting "switch the transmitter between the first and second operational states" prior to amendment).

² Apple's cited cases on p. 5 of its responsive brief are inapplicable. Varia does not dispute that the "transceiver" must be capable of both RFID and voice communications. Rather, Varia disputes where to "draw the box" that defines the transceiver. Apple's "specification" arguments at pp. 5-7 likewise fail. Apple simply ignores the portions of the specification that contravene its single component construction (*see, e.g.*, Opening Br. at 16-18) in view of its incorrect reading of the prosecution history, and improperly attempts to limit the claims based on other disclosed embodiments.

the wrong claim limitation, they also fail because they improperly commit the "cardinal sin" of claim construction by attempting to limit the claims to disclosed embodiments, *see*, *e.g.*, *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320, 1323 (Fed. Cir. 2005), as well as alleged disclaimers that never occurred, are inconsistent with the intrinsic record, and—if they existed at all—were rescinded by acquiescence. *See supra* at 1.A.

Second, Apple dismisses the most relevant part of the intrinsic record relating to switching the *mobile communication device*—the very language at issue. In July 2014, then-pending claim 61 of the related '947 patent recited the limitation "switching the *mobile communication device* from a first state to a second state." Scharn Decl. Ex. 6 at 226. The Examiner expressly rejected the argument that the first and second states are mutually exclusive of each other: "[s]imply put, the claims do not require the first and second states are mutually exclusive of each other." *Id.* at 251. Following the Examiner's rejection, Varia amended then-pending claim 61 to delete the "switching the mobile communication device" language, and never raised the argument again. *Id.* at 264. Thus, Varia acquiesced in the Examiner's position, conceding that a "switchable mobile communications device" does not require mutually exclusive states. (Opening Br. at 12-14). *Semcon IP Inc.*, 2017 WL 2972193, at *9. This clear intrinsic record before the Patent Office again defeats Apple's litigation arguments.

Third, Apple attempts to argue that prosecution history statements made after the '984 and '974 patents issued cannot inform their construction. (Opp. at 16). Apple is wrong. The law is clear that the Patent Office record of later-issued patents can be used to interpret the claims of earlier-issued, related patents. *See, e.g., CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1159, (Fed. Cir. 1997) (finding statements made in child patent reexamination "compelling" and using them

to construe "elasticity" in claims of parent patent). Apple does not even address let alone attempt to distinguish this controlling precedent.³

C. "Proximal Presence" / "Proximal RFID Reader" ('984 Patent, Claims 9, 13, 21,32; '974 Patent, Claims 6, 8, 12; '947 Patent, Claims 9, 16, 26) and "Operational Space" ('947 Patent, Claims 1, 9, 16, 26)

Apple's "proximal presence" and "operational space" arguments are essentially identical.⁴ Apple argues that even though a POSITA would understand that the "abstract concept" of those terms relates to the space between the reader the device where RFID signals are sent and received, the precise numerical boundaries of that space varies and cannot be determined in advance. (Opp. at 21, 23). But that is not the test for definiteness, and Apple's indefiniteness argument accordingly fails. "[P]atentee need not define his invention with mathematical precision in order to comply with the definiteness requirement," and may use descriptive words to "avoid[] a strict numerical boundary to the specified parameter." *Niazi Licensing Corp. v. St. Jude Med. S.C., Inc.*, 30 F.4th 1339, 1347 (Fed. Cir. 2022) (citation omitted). While this may result in a broader claim, "[a] claim is not indefinite just because it is broad." *Id.* Moreover, controlling precedent rejects finding claims indefinite on grounds that particular infringing act may not be determined in advance.

For example, in *Nevro Corp. v. Boston Sci. Corp.*, 955 F.3d 35 (Fed. Cir. 2020), the invention was a spinal cord modulation system to reduce pain, including a "means for generating a *paresthesia-free* therapy signal." *Id.* at 38. "Paresthesia" is a tingling or numbness sensation that varies from patient to patient. *Id.* at 39-40. The Court rejected an indefiniteness challenge to claims directed to a "paresthesia-free therapy signal" based on identical arguments to those Apple raises

³ Third, Apple is incorrect that Varia's proposed construction reads out "switchable" from '984 and '974 patent claims. As the Examiner recognized, the claimed mobile communications device can be switched to various non-mutually exclusive states, including, *e.g.*, phone, phone-ready, RFID communicative state, phone and RFID communicative state together, etc. Scharn Ex. 6 at 251.

⁴ Lieber Decl. Ex. 6 at 167:3-18 ("It's the same, exact same argument essentially. The only difference is that one is about detecting the signal and the other is about operation.").

here. *Id.* at 40 ("That a given signal will eliminate paresthesia in some patients but not others, does not render the claims indefinite. . . . Definiteness does not require that a potential infringer be able to determine *ex ante* if a particular act infringes the claims."); *see also Intertrust Techs. Corp. v. Microsoft Corp.*, 275 F. Supp.2d 1031, 1045 (N.D. Cal. 2003) (claims not indefinite where they "require[d] an evaluation of the context in which [they are] used or describe[] a range of circumstances.").

Here, the intrinsic record teaches how to generate, output, and receive claimed RFID signals. Lieber Decl. Ex. 1 at col. 7, Il. 16-22. Moreover, as Apple's expert Dr. Buehrer conceded, a POSITA would be able to test any configuration and determine infringement. Lieber Decl. Ex. 6 at 173:12-18; 146:3-7, 22-23. Accordingly, a POSITA would know whether a given device is within the scope of the claims. Apple's indefiniteness argument accordingly fails. *See Nevro*, 955 F.3d at 40; *Ironburg Inventions Ltd. v. Valve Corp.*, 64 F.4th 1274, 1287-91 (Fed. Cir. 2023) (finding "substantially the full distance" not indefinite, where "embodiments that allow the claim's purpose to be effectuated are within the scope of the claims, while those that do not are not").

Nor is there any inconsistency between Varia's proposed claim construction here and the '947 patent prosecution—indeed, Varia's proposed "operational space" construction comes directly from the '947 patent prosecution history (Opening Br. at 19). The alleged discrepancy that Apple identifies—that the numerical ranges for active and passive tags can vary—would, at most, impact the precise numerical boundaries of the range. (Opp. at 20). But a POSITA need not define the invention with that level of precision, and in any event, a POSITA could determine infringement. Lieber Decl. Ex. 6 at 173:12-18; 146:3-7, 22-23. The public notice requirements are met, the boundaries of the patent claim are determinable, and Apple's contrary arguments regarding indefiniteness accordingly fail.

D. The "outputting" limitations ('984 Patent, Claims 9, 13, 21, 32; '974 Patent, Claims 6, 8, 12; '947 Patent, Claims 1, 9, 16, 26)

The "outputting" limitations should have their plain and ordinary meaning. Apple's construction is based on several flawed and circular assumptions.⁵ Apple's construction improperly imports an *automatic* limitation from embodiments in the specification to limit the meaning of the claims. But reading limitations from exemplary embodiments into claims that do not recite them is improper. Moreover, Apple has not met the "exacting" standards required to demonstrate that patentee redefined the "outputting" limitations or disavowed their full scope. *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012).

Although the disputed claims do not recite passive emulation, Apple's construction is premised on the argument that all embodiments of passive emulation disclosed in the specification allegedly show automatic RFID output and therefore must be limited to automatic RFID output. But even if the claims were limited to passive emulation—which they are not—Apple's argument fails. First, the specification makes clear that the disclosed embodiments are merely "illustrative" and "alternate embodiments may be practiced." Lieber Decl. Ex. 1, col. 2, ll. 22-25. Thus, the patent contains no "expressions of manifest exclusion or restriction." *Thorner*, 669 F.3d at 1366. Second, Dr. Buehrer readily conceded that Apple's "passive emulation" interpretation departs from its plain and ordinary meaning. Lieber Decl. Ex. 6 at 100:11-15; 132:23-133:1. As he testified, the plain meaning distinction between "passive" and "active" relates to whether a tag is powered by its own internal power source—*not* whether RFID is output automatically. *Id.* at 133:10-134:9. Apple fails to justify limiting the meaning of "passive" to automatic RFID output

⁵ Apple argues the patents redefine "passive" and "active"—*terms that are not recited in the limitations*—contrary to their plain meanings. Apple then argues the patents limit passive emulation to *automatic* RFID output. Finally, Apple asserts that the claims are "drawn to passive outputting," and must be limited to automatic output. (Opp. at 18).

in contravention of its plain meaning. *Evolusion Concepts, Inc. v. HOC Events, Inc.*, 22 F.4th 1361, 1367 (Fed. Cir. 2022) ("We have repeatedly held that 'it is not enough that the only embodiments, or all the embodiments, contain a particular limitation to limit claims beyond their plain meaning."); *Thorner*, 669 F.3d at 1366 (finding it is not enough to consistently use a term in a particular manner to redefine that term).

Second, Apple's proposed construction would improperly render several dependent claims invalid, including '984 patent claim 26 and '974 patent claim 15. For example, under Apple's construction, independent claim 21 of the '984 patent is limited to *passive emulation*. (Opp. at 18). In contrast, Apple's construction would limit claim 26, which depends from claim 21, to *active emulation* because it requires a user instruction to output RFID. Lieber Decl. Ex. 1, cl. 26 (reciting "user... instructing said output"); Lieber Decl. Ex. 6 at 139:3-8 ("the active case is when there's a user instruction to output"). Apple's constructions are untenable. Under controlling precedent, an independent claim must be broader than its dependent claims. Thus, "if a dependent claim reads on a particular embodiment of the claimed invention, the corresponding independent claim must cover that embodiment as well. Otherwise, the dependent claims would . . . be meaningless." *Littelfuse, Inc. v. Mersen USA EP Corp.*, 29 F.4th 1376, 1380 (Fed. Cir. 2022) (citations omitted); *Baxalta Inc. v. Genentech, Inc.*, 972 F.3d 1341, 1346 (Fed. Cir. 2020); *Ortho-McNeil Pharm. v. Mylan Lab'ys, Inc.*, 520 F.3d 1358, 1362 (Fed. Cir. 2008). Apple's construction should be rejected.

Third, Apple's proposed construction would improperly read out active emulation embodiments—a preferred embodiment—from every claim of the '947 patent, whether asserted or not. Lieber Decl. Ex. 6 at 140:15-20; 155:17-22. Apple's proposal violates this additional claim constriction principle. *Broadcom Corp. v. Emulex Corp.*, 732 F.3d 1325, 1333 (Fed. Cir. 2013) ("[A]n interpretation which 'excludes a [disclosed] embodiment . . . is rarely, if ever, correct."").

E. "[Facilitate / facilitating] the user" / "[facilitate / facilitating] a user" ('984 Patent, Claims 6, 26; '974 Patent, Claims 4, 15; '947 Patent, Claims 5, 21)

Apple's argument that "facilitating" is indefinite for being unbound in scope lacks merit. The plain meaning of facilitate is readily apparent from the context of the claims. *Phillips*, 415 F.3d at 1314 (where the is ordinary meaning is readily apparent, claim construction "involves little more than the application of the widely accepted meaning of commonly understood words"); SFA Systems, LLC v. 1-800-Flowers.com, Inc., 940 F. Supp. 2d 433, 442 (E.D. Tex. 2013) ("facilitate" needed no construction). Apple manufactures an indefiniteness argument by conjuring vague examples, unconnected to the specification. It questions whether providing a hard copy "instruction manual" would infringe the claims. (Opp. at 25). But this contradicts Apple's assertion that the claims cannot "be infringed by a device or method that was not a mobile communications device at all." (Opp. at 16-17). Apple's expert—despite acknowledging the ordinary meaning aligns with Varia's construction (Lieber Decl. Ex. 6 at 181:5-21)—devised a handful of impromptu examples, unconnected to the specification. Id. at 176:8-177:24 (e.g., "calling a help line" and "using a secondary device like another phone" to "set up a link to the two and you can type it into the other phone."). These examples fail to meet the "exacting" standards required to redefine "facilitating." Thorner, 669 F.3d at 1366. Moreover, that Dr. Sharony could not, ad hoc, specify every potential example of "facilitating" is of no moment—the law does not require "absolute precision." Nautilus Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 910. Persons of ordinary skill in the art could reasonably ascertain the boundaries of the claims, defeating Apple's argument.

II. CONCLUSION

For the foregoing reasons, Apple's proposed constructions should be rejected.

⁷ Nor does Apple contend with the fact that its proposed examples would appear to make it more difficult, rather than easier, to output a desired RFID. *Compare Ironburg*, 64 F.4th at 1287-91.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of this document has been served on all counsel of record via e-mail on August 21, 2024.

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